

IN THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A computing system comprising:
a circuit board;
a first device having a first heat transfer surface;
a first heat sink including:
a first base thermally coupled to the first heat transfer surface; and
a first array of fins thermally coupled to the first base so as to extend away from the first base in a first direction, wherein the first array of fins includes consecutive fins forming a transverse channel therebetween extending in a second direction perpendicular to the first direction and having opposite transverse open ends;
a second device coupled to the circuit board, the second device having a second heat transfer surface; and
a second heat sink including:
a second base thermally coupled to the second heat transfer surface; and
a second array of fins coupled to the second base and extending at least partially across and over the first array of fins, wherein the first heat sink is sandwiched between the first device and the second heat sink.
2. (Original) The system of Claim 1, wherein the first device is electrically connected to the second device.
3. (Previously Presented) The system of Claim 1, wherein the first array of fins overlaps the first device and wherein the first device generates heat at a first rate and wherein the second device generates heat at a second greater rate.
4. (Canceled)

5. (Previously Presented) The system of Claim 1, wherein the first device comprises a power pod assembly.

6. (Original) The system of Claim 5, wherein the power pod assembly is dedicated solely to supplying power to the processor assembly.

7. (Previously Presented) The system of Claim 1, wherein the first array of fins extends over the first base which overlaps the first device and wherein the first device comprises a power pod assembly.

8. (Previously Presented) The system of Claim 1, wherein the second array of fins overlaps opposite sides of the first device.

9. (Original) The system of Claim 1, wherein the second heat sink includes a heat pipe extending at least partially across the first array of fins.

10. (Original) The system of Claim 9, wherein the heat pipe supports the second array of fins over the first array of fins.

11. (Original) The system of Claim 9, wherein the heat pipe extends at least partially along the second base.

12. (Original) The system of Claim 9, wherein the heat pipe extends from below the first base to above the first array of fins.

13. (Original) The system of Claim 1, wherein the first device and the second device are coupled to one another to form a multi-device module adapted to be connected to the circuit board.

14. (Canceled)

15. (Previously Presented) The system of Claim 1 including a central electronic control coupled to the circuit board.

16. (Previously Presented) The system of Claim 1 including:
a baseboard coupled to the circuit board;
a memory device coupled to the baseboard; and
an input/output device coupled to the baseboard.

17. (Currently Amended) The system of Claim 1 including a fan configured to create an air flow across the second device and across a ~~the~~ fourth device.

18. (Original) The system of Claim 1, wherein at least one of the first array of fins is interleaved with the second array of fins.

19. (Previously Presented) A multi-device heat sink module adapted to be connected to a circuit board, the module comprising:

a first device having a first heat transfer surface;

a first heat sink having a first base thermally coupled to the first heat transfer surface, wherein the first heat sink includes a first array of fins thermally coupled to the first base;

a second device coupled to the first device and having a second heat transfer surface;

a second heat sink having a second base thermally coupled to the second heat transfer surface, wherein the second heat sink includes a second array of fins, wherein the second array of fins extends at least partially across the first array of fins, wherein the second heat sink includes a heat pipe extending at least partially across the first array of fins from below the first base to above the first array of fins; and

a connector connected to one of the first device and the second device and configured to be electrically connected to the circuit board, wherein at least a portion of the second heat sink extends at least partially across the first heat sink.

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Previously Presented) The module of Claim 19, wherein the second array of fins overlaps opposite sides of the first array of fins.

24. (Canceled)

25. (Previously Presented) The module of Claim 19, wherein the heat pipe extends at least partially along the second base.

26. (Canceled)

27. (Original) The module of Claim 19, wherein the first device is electrically connected to the second device.

28. (Original) The module of Claim 19, wherein the first device generates heat at a first rate and wherein the second device generates heat at a second greater rate.

29. (Original) The module of Claim 19, wherein the second device comprises a processor assembly including a central processing unit.

30. (Original) The module of Claim 29, wherein the first device comprises a power pod assembly.

31. (Original) The module of Claim 30, wherein the power pod assembly is dedicated solely to supplying power to the processor assembly.

32. (Original) The module of Claim 19, wherein the first device comprises a power pod assembly.

33. (Previously Presented) The module of Claim 19, wherein the second heat sink includes:

a heat pipe extending above the first heat sink; and

an array of fins thermally coupled to the heat pipe and supported by the heat pipe above the first heat sink.

34. (Currently Amended) A processor module comprising:

a processor configured to be connected to a circuit board, the processor having a first heat transfer surface;

a power pod electrically connected to the processor to supply power to the processor, the power pod having a second heat transfer surface;

a first heat sink overlapping the power pod and thermally coupled to the second heat transfer surface; and

a second heat sink thermally coupled to the first heat transfer surface, wherein the second heat sink extends at least partially across and over the first heat sink,

wherein the second heat sink includes:

a first base thermally coupled to the second heat transfer surface; and

a first array of fins thermally coupled to the first base so as to extend away from the first base in a first direction, wherein the first array of fins includes consecutive fins forming a transverse channel therebetween extending in a second direction perpendicular to the first direction and having opposite transverse open ends; and

wherein the first heat sink includes:

a second base thermally coupled to the first heat transfer surface; and

a second array of fins coupled to the second base, wherein the second array of fins extend away from the second base in the first direction, wherein the second array of fins includes consecutive fins forming a transverse channel therebetween extending in a third direction perpendicular to the first direction and having opposite transverse open ends.

35. (Original) The module of Claim 34, wherein the second heat sink extends completely across the first heat sink.

36. (Original) The module of Claim 35, wherein the second heat sink extends on opposite sides of the first heat sink.

37. (Currently Amended) A multi-device heat sink module for being connected to a circuit board, the module comprising:

a power supply;

a processor;

a first means for dissipating heat emitted by the power supply while not substantially receiving heat from the processor; and

a second means for dissipating heat emitted by the processor, wherein the second means extends at least partially across and over the first means,

wherein the first means for dissipating heat is sandwiched between the second means for dissipating heat and the power supply.

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Previously Presented) A method for dissipating heat from a first electronic device positioned proximate a second electronic device, the method comprising:

directing heat generated by the first device through a first array of fins extending across and around at least a portion of the second device so as to dissipate heat on opposite sides of the portion of the second device, wherein the second device includes a second array of fins and wherein the method further includes nesting the second array of fins within the first array of fins.

44. (Canceled)

45. (Canceled)

46. (Previously Presented) The system of claim 1, wherein the first base is horizontally spaced from and beside the second base.

47. (Previously Presented) A computing system comprising:
a circuit board;
a first device having a first heat transfer surface;
a first heat sink including:
a first base thermally coupled to the first heat transfer surface; and
a first array of fins thermally coupled to the first base;
a second device coupled to the circuit board, the second device having a second heat transfer surface; and
a second heat sink including:
a second base thermally coupled to the second heat transfer surface; and
a second array of fins coupled to the second base and extending at least partially across the first array of fins, wherein at least one of the first array of fins is interleaved with the second array of fins.

48. (Canceled)

49. (Previously Presented) The system of claim 1, wherein the second array of fins extend away from the second base in the first direction, wherein the second array of fins includes consecutive fins forming a transverse channel therebetween extending in a third direction perpendicular to the first direction and having opposite transverse open ends.

50. (Previously Presented) The system of claim 49, wherein the second heat sink extends at least partially across and over the first array of fins in a fourth direction perpendicular to the second direction and the third direction.

51. (Previously Presented) The processor module of claim 34, wherein the first heat sink is sandwiched between the processor and the second heat sink.

52. (Canceled)

53. (Canceled)

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Previously Presented) A multi-device heat sink module adapted to be connected to a circuit board, the module comprising:

a first device having a first heat transfer surface;

a first heat sink including:

a first base thermally coupled to the first heat transfer surface; and

a first array of fins thermally coupled to the first base so as to extend away from the first base in a first direction, wherein the first array of fins includes consecutive fins forming a transverse channel therebetween extending in a second direction perpendicular to the first direction and having opposite transverse open ends;

a second device coupled to the circuit board, the second device having a second heat transfer surface; and

a second heat sink including:

a second base thermally coupled to the second heat transfer surface; and

a second array of fins coupled to the second base and extending at least partially across and over the first array of fins, wherein the first base is horizontally spaced from and beside the second base.